ABSTRACT

An objective of the present invention is to provide a transformant altered so as to produce a secondary metabolite in which a benzene ring of the secondary product is modified at the para-position with a functional group containing a nitrogen atom. A transformant according to the present invention is a transformant of an organism producing a secondary metabolite having a benzene ring skeleton without substitution at the para-position with a functional group containing a nitrogen atom, said transformant being transformed by introducing a gene involved in a biosynthetic pathway from chorismic acid to p-aminophenylpyruvic acid so as to produce a secondary metabolite having a benzene ring skeleton substituted at the para-position with a functional group containing a nitrogen atom. Another objective of the present invention is to provide a novel gene involved in the biosynthetic pathway from chorismic acid to p-aminophenylpyruvic acid. A novel gene according to the present invention comprises genes encoding the amino acid sequences of SEQ ID NOs: 2, 4 and 6 or modified sequences thereof.